MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2015/2016

TWT2231 – WEB TECHNIQUES AND APPLICATIONS

(All sections / Groups)

05 MARCH 2016
2:30PM – 4:30PM
(2 Hours)

INSTRUCTIONS TO STUDENTS

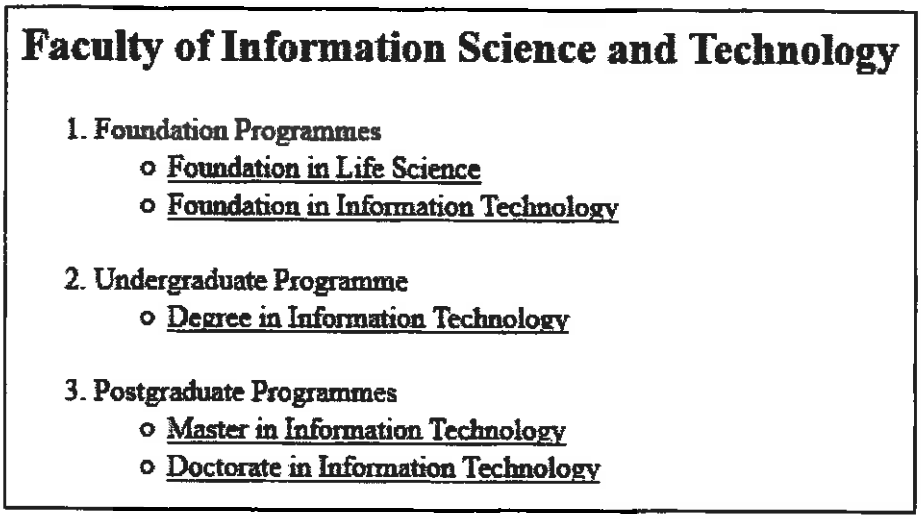
1. This question paper consists of 6 pages with 5 questions only.
2. Attempt **FOUR** out of **FIVE** questions. If you answered all five questions, only the first four questions will be marked.
3. All questions carry equal marks and the distribution of the marks for each question is given.
4. Please print all your answers in the Answer Booklet provided.

Question 1

(a) Write the HTML5 code to create a list of programmes (together with hyperlink) using the information given below:

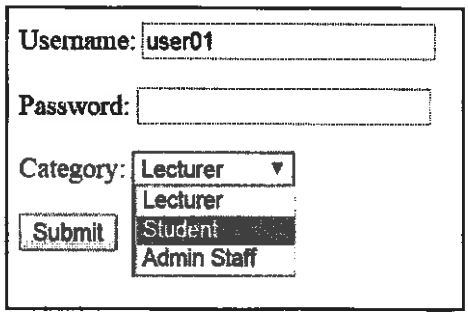
Description	Hyperlink
Foundation in Life Science	fls.mmu.edu.my
Foundation in Information Technology	fit.mmu.edu.my
Degree in Information Technology	dit.mmu.edu.my
Master in Information Technology	mit.mmu.edu.my
Doctorate in Information Technology	dcit.mmu.edu.my

The heading of "Faculty of Information Science and Technology" is in level 2 header. The output is shown below:



[5 Marks]

(b) Write the HTML5 code to create the form as shown below:



Take note that there is a hidden input element "subject" with value of "login_form" and the form should be posted to "verification.php". The default value of the Username is "user01".

[5 Marks]

Continued .....

Question 2

(a) HTML5 codes below produces output as in Figure 2a. After applying *stylesheet.css*, the output as in Figure 2b is obtained. Write the content of the *stylesheet.css*.

[5 Marks]

```
<!DOCTYPE html>
<html>
<head>
<meta charset = "utf-8">
<title>More Styles</title>
      <link rel="stylesheet" type="text/css" href="stylesheet.css">
</head>
<body>
<h2>My Shopping list:</h2>
<ul>
<li>Rice</li>
<li>Sugar
<ul>
<li>White sugar</li>
<li>Brown sugar</li>
</ul>
</li>
<li>Milk</li>
<li>Fruits
<ul>
<li>Orange</li>
<li>Apple</li>
</ul>
<li>KFC <em>Fried Chichen</em></li>
</ul>
<p>Go to the
<a href = "http://www.aeon.com.my">AEON store</a>
</p>
</body>
</html>
```

My Shopping list:

- Rice
- Sugar
  - White sugar
  - Brown sugar
- Milk
- Fruits
  - Orange
  - Apple
- KFC *Fried Chichen*

Go to the AEON store

Figure 2a

My Shopping list:

- *Rice*
- *Sugar*
  - *White sugar*
  - *Brown sugar*
- *Milk*
- *Fruits*
  - *Orange*
  - *Apple*
- *KFC Fried Chichen*

Go to the AEON store

Figure 2b

Continued .....

(b) Write the Javascript code which does the following tasks:

i. Prompt the user to request for an input string
ii. Check whether the input string is a palindrome
iii. Alert the user whether the input string is a palindrome

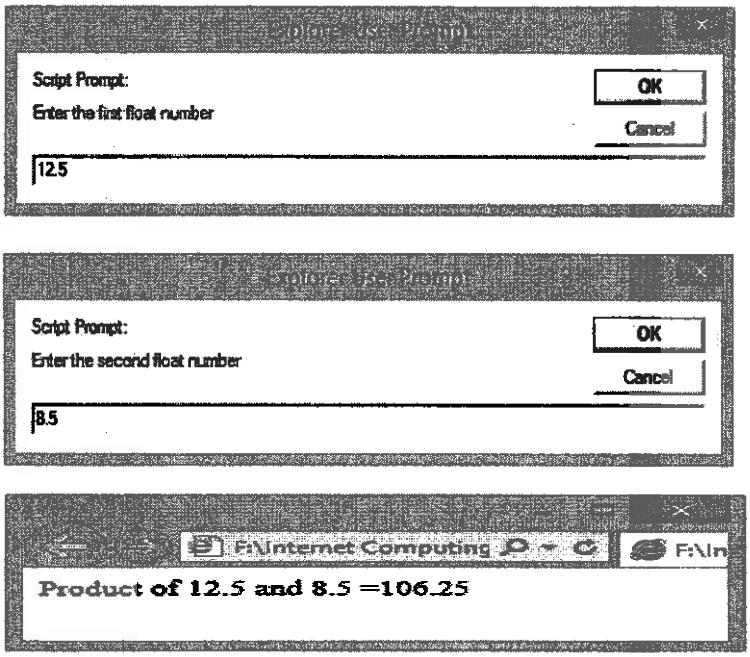
A palindrome is a word, phrase, verse, or sentence that reads the same backward or forward. For example: Madam.

[5 Marks]

Continued .....

Question 3

(a) Write a JavaScript code to compute the product of two float numbers. The program is to get two numbers from the user via input dialog boxes before displaying the output as shown below:



[3 Marks]

(b) GET and POST are the two most common HTTP request types. Explain the differences of these two request types.

[2 Marks]

(c) Write a **recursive function** called **`digitsSummation`** in PHP which takes in an integer and calculate the summation of all digits.

Sample run: argument = 5678, return 26

[5 Marks]

Continued .....

Question 4

(a) Given the following table in a MySQL database:

Table name: Employee

EmpID	FirstName	LastName	Title
1	Bruce	Wong	Engineer
2	Ali	Abdullah	Manager
3	WengHiong	Lau	Secretary
4	Ali	Ramat	Engineer
5	Jennifer	Jackson	Manager
6	Muhammad	Abdullah	Engineer

i) Write an SQL command to retrieve the first name and the last name of employees whose title is Engineer. Sort the results based on the first name.

[2 Marks]

ii) Jennifer Jackson resigned from the company. Thus, Ali Ramat is promoted to replace the vacant position left by Jennifer. Write SQL commands to update the Employee table to reflect the changes in the company.

[3 Marks]

(b) Briefly explain THREE security issues of internet security related to encryption.

[3 Marks]

(c) List TWO properties of primary key in Entity Integrity.

[2 Marks]

Continued .....

Question 5

(a) Write XML statements that conform to the DTD given below:

```
<!ELEMENT student (entry*)>
<!ELEMENT entry (id, name, email)>
<!ATTLIST entry date CDATA #REQUIRED>
<!ATTLIST email note CDATA #REQUIRED>
<!ELEMENTid (#PCDATA)>
<!ELEMENTname (#PCDATA)>
<!ELEMENT email EMPTY>
```

[4 Marks]

(b) Give a full name of XSLT abbreviation. What is the role played by XSLT in XML?

[3 Marks]

(c) List TWO advantages of using server-side scripting and give TWO examples of web server that are commonly used.

[3 Marks]

End of Page